MODIS sensor Working Group (MsWG) Meeting Summary July 9, 2008

Attendance: Vince Salomonson, Gary Toller, Gene Eplee, Bill Barnes, James Kuyper, Chris Moeller, Junqiang Sun, Aisheng Wu, Hongda Chen, Sergey Marchenko, Jack Xiong, Brian Wenny

Scheduled Agenda

Item 1: Recent L1B LUT delivery

- Terra forward update – 5.0.40.7 (07/02/08) – m1 & RVS

Item 2: Instrument status

- Terra and Aqua MODIS are in nominal operations.
- Terra Band 36 Detector 7 Anomaly – see discussion below

Item 3: MCST recent activities

- Terra Band 36 Detector 7 – Anomalous behavior observed between 2008179.2045 and ending 2008181.0655 (June 27-29). Resulted in detector striping in L1B images – the L1A fill value corresponded to either: "b1 calibration coefficient could not be computed" or "cannot compute zero point". The exact cause of this anomaly is unknown and after 2008181.0655 the detector has returned to its stable pre-anomaly behavior in terms of b1 and NEdT. The DN value for all sectors (EV, SV, BB, etc..) during the affected time period is either 0 or 4095, and seems to oscillate between the two values every 67 scans (based on random sample of granules). Proposed action is to issue a QA LUT update to flag this detector as "Inoperable" during the anomaly period.
    - Discussion: Bill suggested it could be caused by an issue in the electronics after the FPA and A/D converter as all detectors share the same ADC and it is unlikely to affect just one individual detector. Jack added that it could be an issue with the digital formatter and not likely to be a problem with detector itself. IOT reported no spacecraft incidents or activities during the anomaly time period.
    - Actions: Check ADC and formatter operations, if possible, during the anomaly period, have IOT contact Raytheon to report the incident and inquire if they have any insight on this behavior.
    - A QA LUT update will be issued to flag the detector as inoperable during th anomaly period.
- Terra A0/A2 v6 baseline timestamps – the reprocessing of all warmup/cooldown activities for Terra is complete and a new baseline LUT derived using the v6 methodology. The v6 LUT has 2 fewer timestamps (both early mission). Differences between v5 and v6 are due to the use of a running yearly average as opposed to individual activities to evaluate the need for updates.
    - Jack suggested a recheck of the timestamps during the Vdet/Itwk tests that were performed early in the mission.

Item 4: Around the Table

- James: Continuing analysis of the SV DN = 0 statistics. The results so far are a bit confusing in that they are more uniform than a Poisson distribution, which is unexpected.

Next Meeting: ~July 23, 2008

Compiled by B. Wenny